

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. 10/743,562  
First Named Inventor : Renuga Gopal  
Art Unit: 1791  
Examiner: Daniels, M.  
Title: FIBER REINFORCED COMPOSITE AND METHOD OF  
FORMING THE SAME  
Filing Date: December 22, 2003  
Docket No. NAA 0020 PA/41049.22  
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Assistant Commissioner for Patents  
Washington, DC 20231

**DECLARATION OF HUANG ZHENG-MING UNDER 37 CFR §1.132**

My name is Dr. Huang Zheng-Ming. Currently I am a Professor in the Department of Engineering Mechanics at Tongji University, Shanghai, China.

In 2003 I was Research Fellow at the National University of Singapore (NUS).

I am listed as a co-author of an article titled "Fabrication of a new composite orthodontic archwire and validation by a bridging micromechanics model", published in Vol. 24 (2003) pp. 2941-2953 of the journal Biomaterials.

The inventors listed on the present patent application (US 10/743,562) developed a new fiber reinforced composite and a method of making the fiber reinforced composite wires. They asked me to develop a theoretical model to predict the mechanical behavior of the new composite wire design. I did this by making use of a bridging micromechanics model and classical lamination theory. The efficiency of the theoretical analysis was verified experimentally by the composite wires produced by the Inventors using their fabrication process (described in the patent application). This work was reported in the published paper. I am not a co-inventor of the present patent application.

I hereby declare that all statements made herein are true, and further that the statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully Submitted,



Huang Zheng-Ming, PhD